REDEEMER
UNIVERSITY COLLEGE

the Armitt
Collection

Charlotte Mason's House of Education,
Scale How, Ambleside, UK, 2009

The **Charlotte Mason Digital Collection** is a not-for-profit database created in 2009-2011 to assist scholars, researchers, educators and students to discover, use, and build upon the Charlotte Mason Collection of archives, journals and books housed in the Armitt Library & Museum (UK). To learn more about this database or to search the digital collection, go to The Charlotte Mason Digital Collection.

Your use of images from the **Charlotte Mason Digital Collection** is subject to a License. To publish images for commercial purposes, a license fee must be submitted and permission received prior to publication. To publish or present images for non-profit purposes, the owner, Redeemer University College, must be notified at cmdc@redeemer.ca and submission of a copy of the context in which it was used also must be submitted to the owner at cmdc@redeemer.ca. Credit lines, as specified in the License, must accompany both the commercial and non-profit use of each image.

Unless you have obtained prior permission, you may not download an entire issue of a journal nor may you make multiple copies of any of the digital images. Higher resolution images are available. [Low resolution (150 dpi), single copy printing is permitted: High resolution images for publication can be purchased. Please contact Redeemer University College in writing as specified in the License to request high resolution images.

While the document originals are housed in the Armitt Library & Museum, Redeemer University College owns the rights to the Digital Images (in jpg/pdf format) of the original archival documents and artifacts. The original Digital Images and database metadata are owned and maintained by Redeemer University College. Multiple images are bound together in PDF Packages. Click here to download the latest version of Adobe Reader for better viewing. In the PDF, click an image thumbnail to view it.

This project was made possible through collaboration among the Armitt Library & Museum (Ambleside, UK), Redeemer University College (Ancaster, Canada) and the University of Cumbria (UK) and with the financial assistance of the Social Sciences and Humanities Research Council of Canada.

Need help? If you do **not** see a side-bar with image thumbnails:
Some of the PDF packages are large and will take some time to download. A very large PDF package may open more successfully if you download it first to your desktop. (From inside the database record, right-click on the link to the PDF package and save the link to your desktop.) Once it's on your desktop, you can open it up with a recent version of Adobe Reader.

If you have a Macintosh with Safari, the default program to open PDFs is Preview, which does not open the PDF packets. Mac users need to download Adobe Reader. If this cover page appears without a list of PDF files (either at the side or bottom of the screen), look for a paper clip or a menu option to view attachments. If you click that, you should see a list of the pages in the PDF package.

Viewing files with Linux: This works with the default PDF viewer that comes pre-installed with Ubuntu. While viewing this cover page in the PDF viewer, click "View" on the top toolbar, and check the box that says "Side Panel". That will bring up the side panel. The side panel will show only this cover page. Click the 'arrow' at the top of the side panel, and it will give you the option to view "attachments." If you click that, you should see a list of PDF files, which are the pages in the PDF package.

Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada

her hands clasped, her eyes upraised to her Lord. The coloring is so sombre that the heavenly place might be represented too dimly if it were not for two thoughts, which Tintoret (with that spirituality I claim for him) has introduced. One is conscious of rays of light striking down through the assembled multitude and falling straight into the remotest corner of the picture; they strike right upon the great globe that St. Christopher is bearing on his back, and fall too on the armour-clad Joshua, until his coat of steel burns like a white flame. These rays of light all stream from the figure of our Lord in the height above. The other thought is, the rapture of the heavenly host, who have now seen the consummation of all things. For behind the clouds, and the figures of the Redeemed, far off, and receding into illimitable and infinite light, are myriads of angelic faces and forms, dimly seen, but appearing to float in a measureless haze of glory.

The great Venetian could do no more for us than this.

In the city where he was so much beloved he died, in the year 1594. With him died also the last flickering flame of religious Art, which had burnt so brightly for three hundred years; and now, in the person of the last great painter of the Venetian School, its life had ebbed away, like the murmur of the sea as it recedes from the sandy shores of Lido.

If any of our readers would care to study for themselves the pictures mentioned in this or other articles upon this subject, they can obtain photographs of the pictures from M. Näjä, St. Mark's Square, Venice. Small size, ½ lire; larger sizes, 1 to 3 lire (1 lire=1 franc).

CHATS WITH NURSE.

By two Mothers.

I. FRESH AIR.

Mrs. Frank Ernest had recently got a new nurse. The former one, who had been with her from the time Eric, the eldest child, was born, had left to be married, and both Mrs. Ernest and the children had deeply felt the parting. Mary had not had much education, and very little book learning; but she had a clear head, and much common sense, and an observant eye, all of which are of more value than knowledge of many ologies. Mrs. Ernest, who had never considered before her marriage, the training of children, and to whom each new baby meant a new study and a new revelation, learnt much that was of great value from Mary, and as she began to read many books on health, character training, and physiology, she in her turn was able to show Mary why, and how many of her theories were right. But Mary had to leave her beloved children to go to a home of her own, and a new nurse reigned in her stead.

Janet had been well taught at school, and had taken several prizes both for good conduct and for lessons, but somehow she had not the instinct or intuition that Mary had had, and Mrs. Ernest found at the end of a fortnight that the children and the nursery were not the same. Cries were heard constantly, the room did not feel as fresh as it had always done, the carpet was always strewn with toys, and poor Janet was often reduced to tears, but made constant brave efforts to keep everything in better order. She had a good heart, and was so anxious to do well, and please her mistress, that at last, in despair, she went to her, and asked her if she would kindly give her a few hints every day, and show her how Mary had managed so much better, that she would write them down and study them, and that in time she hoped to be able to manage as well as her predecessor.

"Indeed, ma'am, I thought I knew quite well how to manage children; I've been nursing for four years; but you said something the other day that I can't get out of my mind. You said, 'Where did Doctor McLean learn before he could practise as a doctor? Why, from the discoveries and knowledge of other men written in books.' I began to think that perhaps there was more in books than I had yet taken in, fornever did I see a man the like of the doctor with children."

Mrs. Ernest laughed. "Evidently it was the doctor who has made the most impression. But I shall be very glad to come to the nursery three evenings a week for half-an-hour, and if Anne likes to come so much the better."

The first evening as Mrs. Ernest was sitting down, she remarked:—

"I wonder, Janet, if this room gets any fresh air. It feels very stuffy to-night."

"Oh yes, ma'am," said Janet. "I leave the door open, when the children go down for their meals, and I opened the window quite two inches for ten minutes, but I was afraid baby might take cold, so I shut it again."

"Has it ever struck you, that although you cannot see the air, it is really full of tiny particles, so small that the eye cannot see them, and that these specks can actually poison living beings, unless we get rid of them?"

Janet looked startled. "Oh dear no, ma'am, we never learnt anything about that. How does the poison get into a room, and how can we get it out?"

"Don't be frightened, but *we* are all pouring out poison into the room we sit in. Every time we breathe in we take in about one pint of air, and every time we breathe out we let out an equal quantity; but the air which we breathe out is very different from that which we take in, the latter containing a full supply of oxygen or 'vital air,' that is, air necessary for life, and containing nothing injurious, while the former contains only a deficient supply of this 'vital air,' and a certain amount of poisonous material both in the form of gas, and still worse of minute solid particles derived from the body which the used-up air carries out with it, and which quickly putrefy."

"I once saw in a book a good illustration, which I have remembered ever since. Suppose we have a fine, smart-looking clock which ticks merrily, but is always two hours late. It looks very well in the face, but it always loses the two hours every week. If we open the case door, we should find light flue and hair and dust had got into the works. The clock-maker certainly did not put them there. The secret was that we have not taken proper care of our clock. It came perfect from the maker's hands, and he did not mean it to go wrong. Many people are like the clock, they complain of aches and pains. You have a bad headache sometimes, and you don't think that you have let anything bad come near you. Things you cannot see may have been floating around you, and they are to you, what the dust and dirt were to the clock. Are you tired now, or shall I try to tell you how to avoid and drive away these mischievous atoms?"

"Oh, I should like to learn more, ma'am," said Janet. "I have often said to Anne that we had not enough air in the room to keep a fly alive."

"If you do not understand me, you must ask questions. I began by saying that we breathe in air, and let out air, so that I may say everybody has *two breaths*. Listen attentively to this. The breath that comes *out* is not the same as the breath that goes *in*, and *what is breathed out must never be breathed in*. When I went to the children's bedroom just now, I found Elsie asleep with her head quite covered up with the bed clothes, so of course I pulled them down, and I hope that when you know the reason why, you will also see that the children's faces are quite free."

"Yes, ma'am, I have noticed that one or two of them always sleep under the clothes, and I thought they would be warmer, as it is such cold weather. I never thought it would do them harm."

"It does harm in this manner, Janet, that they must breathe the same air in that they have let out. If I could show you a cruel experiment on a mouse, by shutting him up in a small box, you would find that when he had taken in all the good air in the box, he would go on breathing his own poison, and would soon faint and die. Many children look white and pasty-faced in the mornings only because they have got into the bad habit of sleeping under the clothes. While we are speaking about sleep, I should just like to mention that if you find any child asleep, breathing through its mouth, please shut it by slightly pressing up the chin. They must be taught to breathe through their nostrils. I will tell you the reason afterwards.

Many years ago, in 1756, a British factory was attacked in India. The English tried to swim across the river, but 146 fell into the hands of the enemy; these were put into a cell, 18 feet long and 14 feet wide, there were only two small holes for windows. The poor prisoners cried and struggled, but after a time there was an awful silence. When the door was opened in the morning 123 were dead, and the 23 living looked more like ghosts than living men. I want you to see that the breath we let out is poison. Fire, and gas and candles need just as much fresh air as we do. Will you light me a taper and I will show you that this is so. Thank you. Now I will hold this tumbler upside down, and hold the lighted taper in it. There—do you see—the light begins to flicker, now it is quite out. The light first used up the good air, and then was obliged to die. For this reason, if a child caught fire, we should roll it up tightly in a rug or blanket, and the fire, not having good air to keep it alive, would at once go out. Now we come to another important point. What makes the difference between the breaths? I should like you to write down this question and the answer. *We take in Oxygen principally, and give out Carbonic Acid.* We take in one or two other gases, but it is not so important that you should know them, as I want to make the subject as simple as possible. You look quite bewildered Janet. I think I must prove this by showing you an experiment. Please reach me the bottle of Baby's lime water. See, I will pour some into this tumbler. Now chemists tell us that carbonic acid put to lime becomes common chalk. If our breath can make this lime water chalky, don't you think it will prove that we must breathe out carbonic acid?"

"Oh, yes, ma'am, I quite see that."

"Then will you hold this glass tube in the lime-water, and breathe through it several times, and we will see what happens." Janet looked rather amused as she sat for a few moments breathing as she had been directed, but soon her amusement turned to astonishment, as she saw the clear lime-water become gradually milky, and quite chalky.

"Well, I never should have thought it possible!" she exclaimed, as she put the glass on the table.[*]

"I am glad you have seen this experiment," continued Mrs. Ernest, "I think it will help you to understand what I am now going to tell you. I do not want to burden you with long names, so I will give you only the two principal ones—*oxygen* and *carbonic acid* gas. Put this down in your note-book. *As oxygen feeds the fire of life, so want of oxygen lets it go out, and even a very small deficiency of oxygen let's it flag.* And a large part of the oxygen contained in the air you take in, is used up in forming the carbonic acid, which, you remember made the lime-water chalky. That explains why the taper went out. We are all of us a *living fire*, and we are warmer than the air around us. We need oxygen to keep our fires burning, one fire requires at least as much oxygen as three human beings, and a gas-burner as much as eleven men. This is why rooms lighted with gas get so warm and oppressive. Fresh air contains the oxygen we see we need so much, and now you will see how important it is for us. We breathe in the good fresh air and the oxygen in it makes our blood red and warm. Your heart sends your blood from your head to your toes in less than one minute. This good air as it goes through you, begins to collect all that is impure or poisonous, or bad in you, and gradually changes into the poison, carbonic acid, which you breathe out, and so get rid of. This is a marvellous arrangement of our Maker, who has done so much for us that we may keep healthy and strong. It is only when we do not obey His wise laws that we suffer. Now you can see, Janet, can you not, what we mean by the ventilation of a room, and why it is so much needed. When you thought you were letting fresh air into the nursery by opening the door, you will now understand that you were letting into the room only the house air, which is probably full of many poisonous germs, and that by only opening the window two inches at the bottom for ten minutes you did little or no good. I will now show you why, in order to get pure air into the room, you *must open the window at the top*, and why I should always like the bedroom window to be open *day and night*.

---

[*] Carbonic acid gas is really not a poison at all, *i.e.*, not a *positive* poison, it does certainly poison *negatively*, *i.e.*, by taking the place of, and excluding the oxygen which ought to be there, but only *so*. The late Sir James Simpson, of Edinboro', used to administer it by inhalation largely in his practice. The impurity of air is certainly roughly tested by the amount of carbonic acid gas in it, but that is merely because it is the most readily available test, and it is known by experiment that other more important (organic) impurities are always present in a corresponding ratio, so that if you ascertain the amount of carbonic acid present you have at the same time a good idea of the amount of other impurities.

"There is a law that as gas gets warm, it expands and becomes lighter; and as it cools, it contracts and becomes heavier. Now this poisoned air which we breathe out is warmer and lighter than the surrounding air, and so rises to the ceiling. If you were to get a ladder and go up it in a crowded room, you will feel almost suffocated when you get near the ceiling."

"Oh, ma'am, is that the reason I felt so faint last Sunday evening in the gallery at church? Was all the bad gas up there?"

"Yes, that was the reason. Now do you not see that if all this bad air can be got out of the room before it cools, and comes down to the floor, we should all be breathing fresh air that contains no poison. In some cottages, I am sorry to say, where the mothers have never had this explained to them, children often sleep on beds made up on the floor. The windows and doors are all shut, and the breath of the sleepers first goes up to the ceiling, and then as it gets cold it drops, drops until it rests on the children, who are certain to waken up with pale faces and headaches. I was once lecturing on this subject to a number of working women. At the end, several told me that they should let good air in their bedrooms: that neither they nor their children ever got up fresh. When I went again the next year, the same women said they all felt quite different. I will tell you what a clever matron of a London hospital said when giving a lecture on ventilation to her nurses. 'It will make a room colder to let out the fire, but not fresher,—very far from it, as the escape of warm air creates continuous circulation of air in a room. Many nurses are so far from understanding this, that when I have remarked that their wards were close, they have often said, "I will let the fire down," as though that would improve it, whereas it would simply make it worse. The broad rule for ventilating with common sense modifications to adapt it to circumstances is, *make up the fire, open the windows at the top, and shut the door.*' I should like you to lift up the bottom sash, and put in this piece of wood which you see is about five inches wide. Put the window down, and there is no draught on the babies' heads, but all the good air ascends to the ceiling. Bees teach us a lesson in ventilation. There are thousands of them in a couple of square feet, and they have no windows, and still they manage to breathe ten times better than most human beings at night. If you were to go near the door and put a feather before it, it would be at once blown away, and if you could look through you would see twenty sturdy little fellows, holding on to the floor with their feet and flapping their wings. When one is tired, he drops out, and another takes his place. You might tell Elsie and Jack this tale to-morrow: it will interest them."

"I am sure it will, ma'am. I should like to ask if carbonic acid gas is bad for everything. Teacher used to tell us that everything had its use; but this doesn't have any, does it?"

"Ah! I am glad you have asked me that question. Yes, even this poison is useful. Nothing that God has made is wasted. It helps to make coal, and it helps to make the trees and plants grow. While *we* need oxygen, *they* need carbonic acid to nourish them. I remember once visiting a poor woman who was obliged to sit always in her chair during the day time. She always had a few pots of flowers on a table close to her. She said to me: 'Do you know I am sure my plants know me. This was so sickly when it came to me, and I have talked to it all day long, and now look, how fine it is. I always talk to all my flowers, and neighbours say I get the finest.' Don't you see that the woman was right? By feeding them with her breath, she gave them life. Of course it is bad to keep them in bedrooms, because at night, strange to say, they want to take in oxygen. But it is getting very late, and time for you to go to bed. Next time we will talk about Water and Cleanliness."

"Could you spare me a few minutes longer, Ma'am, to explain once again to me how it is fresh air helps children with their lessons. I was trying to tell Anne here, and she said: 'Blood and lessons indeed, you will never tell me they are anyhow connected, no more than that sky to that tree,' and I couldn't explain it."

"That is just where Anne makes a mistake. If it were not for the light and warmth sent by the sky, by the sun, that tree would droop, fade, and die. The fresh air gives our children their colour and warmth. I have just explained this to you. When children are using their brains, most blood is there, and whether the brain does its work well or badly, depends on the strength it is receiving from the blood. You see, nurse, that if the air is bad, the blood is bad, and if the blood is bad the brain cannot do its work well, and lessons will be badly done. Can you understand it now, and do you see my reason for being so particular about the ventilation of the schoolroom, and why I insist on ten minutes play in the garden at the end of each hour's lesson. I believe this is the secret of our children's delight in school life, and the energy they show over their work. Another thing I might here explain, is wherever the blood is most needed, there it goes. For instance, if you take the children a long quiet walk, and do not allow them to climb or dance, or search the hedges, the legs get most blood; but what about the little bodies and heads. They are not thriving because they are not receiving the same supply from the stream of life within. If you tied Elsie's arm to her side, it would not require, nor get the blood, and the arm would waste and become useless. You can now understand why play is better than steady level walks.

Now, Janet, I think we have had a very instructive talk. You Nurses hold in your hands much of the happiness of your children's future lives, for a healthy life is a pleasant one, and a useful one too. Body and mind depend upon each other to such an extent that we cannot neglect the one without injuring the other."

"Thank you, Ma'am, I never knew before, how important fresh air was."

[If any Nurse does not quite understand these papers, or would like to ask any questions, "the Mothers" would be very glad to answer any letters addressed to Mrs. Ernest, House of Education, Ambleside.]

OUR GIRLS' CLOTHES.

BY MRS. PARDON.

(Continued from page 922.)

WITH the serge knicker a petticoat bodice must be worn, otherwise a princess petticoat and bodice in one is most comfortable, while the flannel petticoat is fastened on to the stays, and all the weight is borne by the shoulders.

What we women need is the same amount, if not more, of warmth in our clothing, but less in number and weight. This can only be obtained by combining two garments in one, as in the petticoat and bodice just named. It must be borne in mind that there is greater warmth in three woollen articles, than in one of equal thickness, as the air circulates between the various coverings, and thus keeps up the temperature of the body.

In these days of home dressmaking, and cheap really reliable patterns, there is no excuse for unbecoming dresses for anyone.

The yoked dress is about the simplest and most easily made, but is not becoming to tall girls, as the length from the yoke becomes excessive. This is remedied if a pointed belt is worn as it breaks the long line and takes off the "lanky" appearance.

Short-waisted stout girls ought to have close-fitting waisted dresses, with the band brought as low as nature will permit, and the dress made with as few frills and trimmings as possible. Naturally, it must fit neatly, and yet be sufficiently slack to allow the wearer to lift her arms to the utmost extent, otherwise she will not be able to drill in it, and it will probably tear. Blouses, though so useful, are apt to get untidy, but the style of dress to be worn must depend entirely on the girl.